

In the Claims:

1 - 55 (canceled)

56. (currently amended) The method of claim 78 apparatus according to claim 55 wherein the at least one continuous biosignal is an EEG signal or a muscular activation signal or both.

57. (currently amended) The method of apparatus according to claim 56 wherein the muscular activation signal is a measure of eyelid movement.

58. (currently amended) The method of apparatus according to claim 56 wherein the EEG signal is a continuous signal.

59. (canceled)

60. (canceled)

61. (currently amended) The method of apparatus according to claim 55 claim 78 further comprising including means for monitoring signals for signal quality.

62. (currently amended) The method of claim 79 further comprising apparatus according to claim 55 including means for monitoring signals for signal quality.

63. (currently amended) The method of claim 78 apparatus according to claim 55 wherein said acquiring said at least one continuous biosignal the means for acquiring the at least one continuous biosignal or means for acquiring the at least one evoked potential signal includes using at least one disposable or semi-disposable sensor.

64. (currently amended) The method of apparatus according to claim 63 wherein said at least one disposable or semi-disposable sensor includes means for activating an electrical energy source.

65. (currently amended) The method of apparatus according to claim 64 wherein the means for activating said energy source includes the packaging of said electrical energy source.

66. (currently amended) The method of apparatus according to claim 55 79 wherein said acquiring said first continuous biosignal includes the means to acquire the at least one biosignal is using an electrode sensor activatable in response to pressure from an operator or user of said an apparatus performing said method.

67. (currently amended) The apparatus according to claim 55 method of claim 78 wherein the means for stimulating the evoked potential signal stimulates said evoked potential response signal comprises any one or a combination of somatosensory, auditory, or visual evoked response.

68. (canceled)

69. (currently amended) The method of claim 78 apparatus according to claim 68 whereby said stimulating auditory means induces a steady state response signal or any combination of signals inducing associated auditory evoked response or responses classified as the following either singly or in combination greater than: 60 Hz ASSR, 40 Hz ASSR, or less than 20 Hz ASSR.

70. (currently amended) The method of claim 78 further comprising apparatus according to claim 55 including means for displaying the a functional or operational status of any a sensor.

71. (currently amended) The method of claim 78 apparatus according to claim 55 wherein said stimulating the means for inducing an auditory evoked potential response signal includes means for producing any one of or a combination of evoked response paradigms including:

at least one type of click stimulus;

at least one response at spaced intervals within a click stimulus

sounds of white noise or speech

oddball sound characteristics

unusual sound characteristics

masked noise sounds

unanticipated noise sounds

composite sounds

familiar sounds

recognizable sounds in reference to said being patient

wherein a combination of any sound stimulus is generated according to a predetermined sequence.

72. (currently amended) The method of apparatus according to claim 71 wherein the predetermined sequence is determined by determination means ~~incorporated within the apparatus~~.

73. (currently amended) The method of apparatus according to claim 72 including ~~means for~~ alerting an operator of ~~the~~ a status of at least one sensor.

74. (canceled)

75. (canceled)

76. (canceled)

77. (canceled)

78. (previously presented) A method for acquiring, characterising and classifying biosignals from a living being for determining the state of consciousness of said being comprising:

acquiring at least one continuous biosignal;

stimulating an evoked potential response signal in said being;

deriving at least one evoked potential response signal from said at least one continuous biosignal;

deriving a first index of consciousness from said continuous biosignal;

deriving a second index of consciousness from said evoked potential response signal; and

classifying said indices as being representative of entering or leaving consciousness according to a weighting process.

79. (Amended) A method for acquiring, characterising and classifying biosignals from a living being for determining the state of consciousness of said being, comprising:

acquiring ~~at least~~ a first continuous biosignal;

stimulating at least one evoked potential response signal in said ~~first continuous biosignal being~~;

deriving at least one evoked potential response signal from said first continuous biosignal;

~~transforming deriving from said first continuous biosignal according to a weighting calculation according to a mediation process- a first index of consciousness;~~

~~transforming deriving from said at least one evoked potential response signal according to said weighting calculation a second index of consciousness ; and~~

~~determining whether the being is entering or leaving consciousness based on said indices calculating an index from said transformed first continuous biosignal and said transformed evoked potential response signal.~~

80. (New) The method of claim 78 wherein said at least one evoked potential response signal includes one or more of:

a first latency signal acquired from any of a cochlear, eighth nerve or eighth nerve compound action potential, said signal having a duration substantially of 0 to 5 ms;

a second fast latency signal acquired from any of an auditory brainstem response, wave I, wave II, wave III, wave IV, or wave V, said signal having a duration substantially of 2 to 20 ms;

a third early cortical or middle latency signal said signal including any of MLAEP, Na, Pa, TP41, Pb, or Nb, said signal having a duration substantially of 10 to 100 m sec;

a fourth slow latency vertex audio evoked potential signal including any of P1, N1, P2, or N2 having a duration substantially of 50 to 300 ms; and

a fifth contingent potential processing signal (PCP), including any one of or a combination of mismatched negativity, Nd, N2b, P3a, P3b, N400, or P600.